

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s):	Bentwich, Itzhak	Art Unit:	1635
App. No.:	10/709,577	Examiner:	WOLLENBERGER, LOUIS V
Conf. No.:	3576	Title:	SMALL MOLECULES MODULATING ACTIVITY OF MICRO RNA OLIGONULEOTIDES AND MICRO RNA TARGETS AND USES THEREOF
Filing Date:	May 14, 2004		

**REPLACEMENT SEQUENCE LISTING UNDER 37 C.F.R. § 1.825(a)**

Dear Sir:

In compliance with 37 C.F.R. § 1.52(e), please find submitted herewith a replacement Sequence Listing filed pursuant to 37 C.F.R. § 1.825(a).

SEQ ID NOS: 10068178-10068183 are new, support for which can be found at paragraph 0499 of the application as originally filed.

SEQ ID NOS: 10068186-10068189, 10068192-10068193, 10068306-10068309 are new, support for which can be found at paragraphs 0562-0582 of the application as originally filed.

SEQ ID NOS: 10068194-10068280 are new, support for which can be found at Figure 22 as originally filed.

SEQ ID NOS: 10068281-10068285 are new, support for which can be found at Figure 24A as originally filed.

SEQ ID NOS: 10068286-10068296 are new, support for which can be found at Figure 23A as originally filed.

SEQ ID NOS: 10068297-10068305 are new, support for which can be found at Figure 25 as originally filed.

SEQ ID NO: 10068310 is new, support for which may be found at Table 10 as originally filed. Table 10, lines 345905-345934 recite:

The GR5737 folded precursor RNA, herein designated GR FOLDED PRECURSOR RNA is naturally processed by cellular enzymatic activity into at least 82 separate GAM precursor RNAs  
 GAM353392 precursor RNA, GAM353393 precursor RNA,  
 GAM353394 precursor RNA, GAM353395 precursor RNA,  
 GAM353396 precursor RNA, GAM353397 precursor RNA,  
 GAM463777 precursor RNA, GAM353398 precursor RNA,  
 GAM353399 precursor RNA, GAM353400 precursor RNA,

GAM353401 precursor RNA, GAM353402 precursor RNA,  
 GAM353403 precursor RNA, GAM353404 precursor RNA,  
 GAM353405 precursor RNA, GAM353406 precursor RNA,  
 GAM353407 precursor RNA, GAM353408 precursor RNA,  
 GAM353409 precursor RNA, GAM340661 precursor RNA,  
 GAM353410 precursor RNA, GAM353411 precursor RNA,  
 GAM353412 precursor RNA, GAM353413 precursor RNA,  
 GAM353414 precursor RNA, GAM463778 precursor RNA,  
 GAM415273 precursor RNA, GAM435659 precursor RNA,  
 GAM435660 precursor RNA, GAM415274 precursor RNA,  
 GAM415275 precursor RNA, GAM353415 precursor RNA,  
 GAM353416 precursor RNA, GAM399339 precursor RNA,  
 GAM353417 precursor RNA, GAM353418 precursor RNA,  
 GAM353419 precursor RNA, GAM353420 precursor RNA,  
 GAM353421 precursor RNA, GAM353422 precursor RNA,  
 GAM353423 precursor RNA, GAM353424 precursor RNA,  
 GAM353425 precursor RNA, GAM353426 precursor RNA,  
 GAM353427 precursor RNA, GAM353428 precursor RNA,  
 GAM353429 precursor RNA, GAM353430 precursor RNA,  
 GAM353431 precursor RNA, GAM353432 precursor RNA,  
 GAM463780 precursor RNA, GAM353433 precursor RNA,  
 GAM353434 precursor RNA, GAM353435 precursor RNA,  
 GAM353436 precursor RNA, GAM353437 precursor RNA,  
 GAM353438 precursor RNA, GAM353439 precursor RNA,  
 GAM353440 precursor RNA, GAM353441 precursor RNA,  
 GAM353442 precursor RNA, GAM353443 precursor RNA,  
 GAM353444 precursor RNA, GAM353445 precursor RNA,  
 GAM353446 precursor RNA, GAM353447 precursor RNA,  
 GAM353448 precursor RNA, GAM353449 precursor RNA,  
 GAM353450 precursor RNA, GAM353451 precursor RNA,  
 GAM353452 precursor RNA, GAM399341 precursor RNA,  
 GAM353453 precursor RNA, GAM353454 precursor RNA,  
 GAM353455 precursor RNA, GAM353456 precursor RNA,  
 GAM353457 precursor RNA, GAM353458 precursor RNA,  
 GAM353459 precursor RNA, GAM353460 precursor RNA,  
 GAM353461 precursor RNA and GAM353462 precursor RNA,  
 herein schematically represented by GAM1 FOLDED  
 PRECURSOR RNA through GAM3 FOLDED PRECURSOR  
 RNA. Each GAM folded precursor RNA is a hairpin-shaped RNA  
 segment, corresponding to GAM FOLDED PRECURSOR RNA of  
 Fig. 8.

As shown in Table 1 below, the following SEQ ID NOS, all of which were disclosed in the application as originally filed, represent the sequences of the following GAMS, which are all products of the processing of GR5737 (SEQ ID NO: 10068310):

Table 1

SEQ ID NO	GAM	Genomic positions from chromosome 14, plus strand (according to Human Genome Sequence hg 18, NCBI Build 36.1, March 2006)
6876154	353396	100558142 - 100558228
6852582	353399	100561081 - 100561193
6792146	353405	100562873 - 100562957
6866677	353406	100563193 - 100563275
6816665	353410	100565724 - 100565805
6807279	415273	100576159 - 100576245
6766934	435659	100576864 - 100576950
6764600	415274	100582536 - 100582618
6846774	415275	100583402 - 100583490
6759618	353416	100584748 - 100584839
6797277	399339	100585662 - 100585742
6859396	353422	100588529 - 100588609
6862412	353424	100590396 - 100590478
6758196	353432	100591348 - 100591414
6767976	463780	100591501 - 100591582
6864591	353446	100596663 - 100596765
6846490	353450	100598122 - 100598210
6827549	353455	100601368 - 100601495
6824457	353456	100601543 - 100601624
6832127	353457	100601684 - 100601763
6773276	353459	100602007 - 100602078
6791269	353462	100602810 - 100602890

The GAMS of Table 1 are located on the plus strand of human chromosome 14 as indicated in Table 1. Therefore, SEQ ID NO: 10068310 (GR5737) represents the sequence of the GAMS listed in Table and the intervening sequences that are located in between the GAMS of Table 1 at the following genomic locations:

Table 2

<b>Genome positions of intervening sequences on chromosome 14, plus strand</b>
100558229-100561080
100561194-100562872
100562958-100563192
100563276-100565723
100565806-100576158
100576246-100576863
100576951-100582535
100582619-100583401
100583491-100584747
100584840-100585661
100585743-100588528
100588610-100590395
100590479-100591347
100591415-100591500
100591583-100596662
100596766-100598121
100598211-100601367
100601496-100601542
100601625-100601683
100601764-100602006
100602079-100602809

SEQ ID NO: 10068310 (GR5737) thus in total represents the plus strand of human chromosome 14 at positions 100558142 to 100602890 (See Table 1).

In view of the new sequences submitted herewith being supported by the application as originally filed, Applicant respectfully submits that the replacement Sequence Listing contains no new matter in accordance with 37 C.F.R. § 1.825(a).

Respectfully submitted,

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